

CITY OF WESTMINSTER WESTMINSTER, MARYLAND

STANDARD

SPECIFICATIONS

FOR

CONSTRUCTION OF

PUBLIC UTILITY SYSTEMS,

ROADS AND STORM DRAINS

APPROVED BY:

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Revised: 1/6/00

CONTRACT SPECIFICATIONS

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DEFINITIONS

- ADDENDA Written or graphic instruments issued prior to the execution of the Contract Agreement which modify or interpret the contract documents, by additions, deletions, clarifications or corrections.
- BID The offer or proposal of the bidder submitted on the prescribed form setting forth the prices for the work to be performed.
- **BIDDER** Any person, firm or corporation submitting a bid for the work.
- **BONDS** Bid, Performance, and Payment Bonds and other instruments of security, furnished by the Contractor and his surety in accordance with these Contract Documents.
- CHANGE ORDER A written order to the Contract, signed by the Owner, Engineer, and other required agency representatives, authorizing an addition, deletion or revision in the work within the general scope of the Contract Documents, or authorizing an adjustment in the contract price or contract time.
- **CONTINGENT ITEMS** Those fixed price items listed in the proposal required to complete the contract, over and above the work covered by the bid items.
- CONTRACT DOCUMENTS The contract, including advertisement for Bids, Information for Bidders, Bid, Bid Bond, Written Agreement, Payment Bond, Performance Bond, Notice of Award, Notice to Proceed, Change Orders, drawings, these specifications, standard specifications, and addenda.
- **CONTRACT PRICE** The total monies payable to the Contractor under the terms and conditions of these Contract Documents.
- CONTRACT TIME The number of calendar days stated in the Contract Documents for the completion of the work.
- CONTRACTOR The person, firm or corporation with whom the Owner
 has executed the Agreement.

- DRAWINGS, PLANS The part of the contract documents which show the characteristics and scope of work to be performed and which have been prepared by the Engineer and approved by the Engineer and Owner.
- FIELD ORDER A written order effecting a change in the work not involving an adjustment in the contract price or an extension of the contract time, issued by the Engineer to the Contractor during construction.
- NOTICE OF AWARD The written notice of the acceptance of the bid from the Owner to the successful bidder.
- NOTICE TO PROCEED Written communication issued by the Owner to the Contractor authorizing him to proceed with the work and establishing the date of commencement of the work.
- OWNER The property owner or developer, a corporation, association, partnership, or individual for whom the work is to be performed. The party of the first part, as set forth in the Contract Documents.
- PROJECT The undertaking to be performed as provided in these Contract Documents.
- SHOP DRAWINGS All drawings, diagrams, illustrations, brochures, schedules and other data which are prepared by the Contractor, a Subcontractor, manufacturer, supplier or distributor, which illustrates how specific portions of the work shall be fabricated or installed.
- **SPECIFICATIONS** A part of the Contract Documents consisting of written descriptions of a technical nature of materials, equipment, construction systems, standards and workmanship.
- SUBCONTRACTOR Any individual, firm or corporation having a direct contract with the Contractor or with any other Subcontractor for the performance of a part of the work at the site.
- when the construction of the project or a specified part thereof is sufficiently completed, in accordance with the contract documents, so that the project or specified part can be utilized for the purposes for which it is intended.
- **SUPPLIER** Any person or organization who supplies materials or equipment for the work, including that fabricated to a special design, but who does not perform labor at the site.

- WORK Any and all obligations, duties and responsibilities necessary to produce the construction required by these Contract Documents, all labor, materials and equipment incorporated or to be incorporated in the project.
- SURETY The corporate body bound with and for the full and complete performance of the contract, and for the payment of all debts pertaining to the work. When applying to the proposal guarantee it refers to the corporate body which engages to insure the execution by the Bidder of a satisfactory contract.
- WRITTEN NOTICE A communication addressed to any party involved in the project in writing. It is to be considered delivered and the service thereof completed, when posted by certified or registered mail to the said party or his authorized representative on the work.

- SECTION 1 -

GENERAL CONDITIONS

1-01. GENERAL:

These General Provisions are hereby made a part of the Contract. In case of conflict with other portions of the specifications, the Special Provisions shall govern.

1-02. INTENT OF DRAWINGS AND SPECIFICATIONS:

It is the intent of the drawings, specifications, and supplementary documents to provide the Contractors with such information and instructions as may be necessary to complete the contemplated work. The work under the contract shall be built of the materials, sizes, and dimensions, on the lines and slopes, at the depths, with the connections and in the manner called for by the specifications and as shown on the contract drawings, or in accordance with such changes as may be approved from time to time during the progress of the work as hereinafter provided. In case of any conflict between the specifications and drawings, the Engineer shall determine which shall govern.

1-03. WORK TO BE DONE BY THE CONTRACTOR:

The Contractor shall do all the work and furnish all the labor, materials, tools and appliances necessary and proper for performing the work required by the contract, in the manner called for by the specifications and within the contract time. He shall complete the entire work, together with such extra work as may be required, at the prices bid or fixed thereby to the satisfaction of the Owner, Engineer, and City, and in accordance with the specifications and drawings.

1-04. PLANS AND SPECIFICATIONS SUPPLEMENTARY:

The specifications are intended to supplement and clarify the plans as sometimes work is called for in the specifications that is not shown on the plans and sometimes the plans indicate work that is not mentioned in the specifications. Both plans and specifications must be complied with in order to fulfill the contract requirements; and any work called for by either is as binding as though it were called for by both. In case of conflict between drawings and specifications, the City shall decide which shall prevail. In all cases of doubt as to the true meaning of the specifications, plans and/or drawings, the decision of the City shall be final and conclusive.

1-05. CONSTRUCTION IN RIGHTS-OF-WAY AND CONSTRUCTION STRIPS:

- All permanent construction will be within public rights-of-way or other easements or rights-of-way through private property acquired by the Owner as shown on the drawings and the Contractor shall confine his operations strictly within the limits of the rights-of-way or other easements and construction strips as shown, unless he has the written permission of the owner of the adjacent property to occupy additional ground. A copy of the written permission shall be placed on file with the City. Trees in the construction strips shall not be cut down except with the written permission of the owner of the property. Trees marked to be protected in right-of-way or other easements or construction strip shall be barricaded by 2-inch by 4-inch boards in a box form 10-feet square. Trees permitted to be cut down shall be cut to cord length and stacked. Stumps, roots, branches and other debris shall be removed from the site unless otherwise noted or directed.
- B. All work through private property shall be done in such manner as to avoid all cutting of vegetation and other disturbances of the terrain not actually necessary in the installation of the pipes and appurtenances. Lunch papers shall be promptly burned and empty cans, milk bottles, and other empty containers shall not be strewn around or allowed to accumulate on the property. Upon completion of the work, the Contractor shall clean up within the rights-of-way or other easements and construction strips and shall restore the surface, shrubbery, fences and other valuable improvements to at least equal to original condition. The above work is to be included in the contract price bid.
- C. Any damage by the Contractor to property outside the limits of the rights-of-way or other easements or construction strips, as the case may be, shall be restored by the Contractor at his own expense.

1-06. PROTECTION OF PROPERTY AND STRUCTURES:

The Contractor shall, at his own expense, sustain in their places and protect from direct or indirect injury all pipes, poles, tracks, walls, buildings and other structures or property in the vicinity of his work whether above or below the ground or that may appear in the trench. He shall at all times have a sufficient quantity of timber and plank, chains, ropes, etc., on the ground and shall use them as necessary for sheeting his excavations and for sustaining or supporting any structures that are uncovered, undermined, endangered, threatened or weakened. The Contractor shall take all risks attending the presence or proximity of pipes, poles, tracks, walls, buildings and other structures and property, of every

kind and description, in or over his trenches or in the vicinity of his work, whether above or below the surface of the ground and he shall be responsible for all damages and assume all expense for direct injury, caused by his work, to any of them, or to any person or property by reason of injury to them, whether such structures are or are not shown on the drawings.

1-07. OBSTRUCTIONS SHOWN ON DRAWINGS:

Certain information regarding the reputed presence, size, character and location of existing underground structures has been shown on the contract drawings. There is no certainty of the accuracy of this information and it shall be considered by the Contractor in this light. The locations of underground structures shown may be inaccurate and obstructions other than those shown may be encountered. The Contractor shall hereby distinctly understand that the City is not responsible for the correctness or sufficiency of the information given; that he shall have no claim for delay or extra compensation on account of incorrectness of information given, or on account of the insufficiency orabsence οf information obstructions, either revealed or not revealed by the drawings.

1-08. REMOVAL OF OBSTRUCTIONS:

- A. Should the position of any pipe, conduit, pole or other structures, above or below the ground, be such as, in the opinion of the Engineer or City, to require its removal, realignment or change, due to work to be done under the contract, the work of removal, realignment or change will be done as extra work unless called for by the plans and specifications or will be done by the owner of the obstructions, without cost to the City. The Contractor shall uncover and support the structures, at his own expense, before such removal, and before and after such realignment or change, as constituting part of the contract; and the Contractor shall not be entitled to any claims for damage or extra compensation on account of the presence of said structure or on account of any delay in the removal or rearrangement of the same.
- B. The Contractor shall, without extra compensation, break through and reconstruct, if necessary, the invert or arch of any sewer, culvert or conduit that may be encountered if said structure is in such position, in the judgment of the City as not to require its removal, realignment or complete reconstruction.
- C. The Contractor shall not interfere with any persons, firms or corporations, or with the City, in protecting, removing, changing or replacing their pipes, conduits, poles

or other structures; but he shall suffer said persons, firms or corporations, or the City, to take all such measurements as they may deem necessary or advisable for the purpose aforesaid, and the Contractor shall thereby be in no way relieved of any of his responsibilities under the contract.

1-09. EXISTING PUBLIC UTILITY STRUCTURES:

- A. At least three days prior to starting work in the vicinity of gas mains, telephone and electric conduits and other underground utility structures or their appurtenances, the Contractor shall notify the public utility having jurisdiction of his intention so that the utility may have representatives present. The Contractor shall support and protect the structures as these representatives shall require and shall take any other steps that may be necessary to protect the structures from disturbance or damage. Call "Miss Utility" (800) 257-7777. Call City of Westminster 848-9000 for water main locations (48 hours notice). Call Baltimore Gas and Electric Company 561-2584.
- B. Any damage to these structures resulting from the Contractor's operations shall be at his responsibility and any expense to which the Owner or City may be put by reason of any such damage will be charged against the Contractor and deducted from any monies due or to become due him. All of the provisions contained in this section shall be strictly adhered to by the Contractor at no additional compensation over the price bid for the work.

1-10. STORAGE OF MATERIALS:

Materials shall be stored so as to insure the preservation of their quality and fitness for the work. When considered necessary, they shall be placed on wooden platforms, or other hard, clean surface and not on the ground, and shall be located so as to facilitate prompt inspection. Lawns, grass plots, or other private or public property shall not be used for storage purposes without written permission of the owner or leasee of said property.

1-11. STRUCTURES TO BE KEPT CLEAN:

During the progress of the work, until the completion and final acceptance thereof, all structures, including pipe lines and their appurtenances, shall be kept entirely clean throughout. Obstructions or deposits, at any time discovered, shall be removed at once by the Contractor without extra compensation. After the completion of the work the structures, pipe lines and their appurtenances shall be left clean, free and in good order.

1-12. FINAL CLEANING UP:

Within 10 days after the completion of the work and before final acceptance, the Contractor shall, without charge therefore, tear down and remove all temporary buildings and other structures built by him, shall remove all rubbish of all kinds from any ground which he has occupied, and shall leave the site of the work in a clean and neat condition.

1-13. GUARANTEE:

The Contractor hereby guarantees all of the work performed under this contract for a period of one year after the date of final "acceptance" therefore by the City, as follows:

- 1. Against all faulty or imperfect materials and against all imperfect, careless, and/or unskilled workman-ship.
- 2. That all pipe lines and structures shall be water tight and that leakage will not exceed the limits set forth in the specifications.
- 3. The Contractor agrees to replace with proper workman-ship and materials, and to re-execute, correct, or repair without cost to the Owner or City any work which may be found to be improper or imperfect and to restore and maintain all roads, shoulders, ditches and crossings to their original condition and in accordance with the terms of the appropriate agency permits.
- 4. No use or acceptance by the Owner or City of the work or any part thereof, nor any failure to use the same, nor any repairs, adjustments, replacements or corrections made by the Owner or City due to the Contractor's failure to comply with any of his obligations under the contract documents, shall impair in any way the guarantee obligations assumed by the Contractor under these documents.

1-14. GUARANTEE BOND: (MAINTENANCE BOND)

- A. Before final payment is made by the Owner, the Contractor shall be required to furnish the Owner with a Guarantee Bond in the amount of 10% of the Contract. The bond must be executed by a surety satisfactory to the Owner and shall be effective for the one-year guarantee period.
- B. It is understood and agreed that in the event the Contractor fails to re-execute, correct or repair, any work performed in the construction of the contract which may be

found to be improper or imperfect, or otherwise fails to fulfill the terms of the Guarantee, the Owner may purchase materials, tools and equipment and employ labor, or let a contract, as required to perform the necessary corrective work covered in the Guarantee. All costs and expenses incurred thereby by the Owner shall be charged against the Guarantee Bond.

1-15. SUPERVISION AND DIRECTION OF WORK:

The work shall be under the general supervision of the Engineer and City. While it is intended that the Contractor shall be allowed to carry on the contract in accordance with such general plan as may appear to him most desirable, the City, at its discretion, may from time to time direct the order in which and points at which, the work shall be prosecuted; and shall exercise such general control over the conduct of the work, at any time or place, as shall be required, in its opinion to safeguard the interests of the City. The Contractor shall have no claim for damages or extra compensation on account of the fact that it shall have been necessary to carry on the work in different sequence from that which he may have contemplated. The Contractor shall immediately comply with any and all orders and instructions given by the City, but nothing herein contained shall be considered such an assumption of control over the work by the City as to relieve the Contractor of any of his obligations or liabilities under the contract.

1-16. DECISIONS AND EXPLANATIONS BY ENGINEER:

- A. The City shall make all necessary explanations as to the meaning and intent of the specifications and drawings and shall give all orders and directions, either contemplated therein or thereby, or in every case in which a difficult or unforeseen condition arises during the prosecution of the work. Should there be any discrepancies in or between, or should any misunderstanding arise as to the import of anything contained in the drawings and specifications, the decision of the City shall be final and binding. Any errors or omissions on the drawings or in the specifications may be corrected by the Engineer when such corrections are necessary for the proper fulfillment of their intent as construed by him.
- B. The City shall in all cases determine the amount, quality and acceptability of the work to be paid for under the contract, and shall decide all questions in relation to said work. Its decision and estimate shall be final and conclusive, and in case any question shall arise between the parties regarding the contract, such decision and estimate shall be a condition precedent to the right of the Contractor to receive payment under that part of the contract which is in dispute.

C. Decisions and interpretations will be rendered by the City as promptly as possible, but should delay occur, for any reason, the Contractor shall have thereby no claim for damage or extra compensation.

1-17. MATERIAL SAMPLES:

- A. Before any contract is awarded, the Bidder shall be required to furnish a complete statement of the origin, composition and manufacturer of any or all materials to be used in the work, together with samples, which samples may be subjected to the tests provided for in these specifications to determine their qualities and fitness for the work.
- B. The Contractor shall notify the City where and when he purchases pipe, joining material, etc., for this contract and such notice shall be given to the City in sufficient time to allow for inspection of such materials at the point of manufacture.

1-18. OWNER MAY INCREASE OR DECREASE QUANTITIES:

- A. The Owner reserves the right to increase or decrease the quantity of material to be furnished or work to be done under the contract wherever he deems it advisable or necessary, and such increase or decrease shall in no way vitiate the contract.
- B. The Contractor will be paid for the actual quantity of authorized work done or material furnished under each item of the proposal, at the unit price stipulated for such item. In case the quantity of any item is increased, the Contractor shall not be entitled to compensation over and above the unit price bid for such item; and in case the quantity of any item is decreased the Contractor shall have no claim for damages on account of loss of anticipated profits because of such decrease.

1-19. INSPECTION:

The City will appoint such person or persons as it may deem necessary to properly inspect the materials furnished and the work done under the contract, and to see that the same strictly correspond with the drawings and specifications. Work and materials will be inspected promptly, but if, for any reason, delay should occur, the Contractor shall have thereby no claim for damages or extra compensation. Materials and workmanship shall be always subject to the approval of the City; but no inspection, approval or acceptance of any part of the work or of materials used therein, nor any payment on account thereof, shall prevent the rejection of said materials or work at any time thereafter during the existence of the

contract, should said work or materials be found to be defective or not in accordance with the requirements of the specifications and contract.

1-20. COOPERATION OF CONTRACTOR:

- A. The Contractor will be supplied with five (5) copies of the drawings and of the specifications. The Contractor shall have available on the work at all times at least one copy of the drawings, and a complete book of the specifications; he shall give the work the constant attention necessary to facilitate the progress thereof, and shall cooperate in every way with the City.
- B. The Contractor shall have at all times a competent superintendent or foreman capable of reading and thoroughly understanding the drawings and specifications as his agent on the work to direct the work and to receive instructions from the City. The superintendent or foreman shall have full authority to execute the order or directions of the City without delay and to promptly supply such materials, tools, plant equipment and labor as may be required. Such superintendent or foreman shall be furnished irrespective of the amount of work. The giving of orders or directions in the manner aforesaid shall be equivalent to their receipt by the Contractor.
- C. The Contractor shall furnish the City with every reasonable facility for ascertaining whether or not the work performed and materials used are in accordance with the requirements of the specifications and contracts.

1-21. SERVICE OF NOTICES TO CONTRACTOR:

The mailing, in a United States post office box, of a written communication, notice or order, addressed to the Contractor at the business address filed with the Owner or to his office at the site of the work shall be considered as sufficient service upon the Contractor of such communication, notice or order, and the date of service shall be the date of such mailing.

1-22. LINES, GRADES AND ELEVATIONS:

A. The Contractor shall furnish the field stakeout of all necessary lines, grades, and elevations to complete the work as shown on the plans and specifications. Such stakeouts must be approved by the City, and corrected if and as necessary, before the Contractor proceeds with construction. The Contractor shall have no claims for damages or extra compensation due to delays originating from unapproved stakeouts and/or necessary corrections thereto.

B. The Contractor shall be required to prepare cut sheets on forms. These forms are to be submitted to the City two days prior to the excavation of any trench section. The Contractor shall be responsible for the accuracy of the finished work.

1-23. WORKMANSHIP:

All materials furnished and all work done shall be of the quality and character required by the drawings and specifications. Where no standard is specified for such work or materials, they shall be of a kind acceptable to the City. Upon the completion of the contract, the entire work shall be delivered to the City perfect and complete and in a satisfactory working condition.

1-24. SKILLED LABOR ONLY SHALL BE USED:

Competent labor only shall be used. Any employee of the Contractor who shall use profane or abusive language to the Inspector or other employees of the City, or is otherwise disorderly and interferes with him in the performance of his duties, or who shall disobey or evade his instructions, or who is careless and incompetent, shall be discharged on the request of the City and shall not again be employed except with the City's consent.

1-25. ALTERATION OF PLANS AND CHARACTER OF WORK:

- A. The Owner and/or City reserve the right to make such alteration in the plans or in the character of the work as may be considered necessary or desirable from time to time to complete fully and perfectly the construction of the work, provided such alterations do not materially change the original plans and specifications, and such alterations shall not be considered as a waiver of any condition of the contract nor to invalidate any of the provisions thereof. Should such alterations in the plans or in the character of the work be productive of increased cost or result in decreased cost to the Contractor, a fair and equitable sum therefore, to be agreed upon in writing by the Contractor, and the Owner, and approved by the City before such work is begun, shall be added to or deducted from the contract price, as the case may be.
- B. No alterations in the plans or in the character of the work shall be made without the previous written approval of the City. Approved change orders are required for alterations or work character modifications costing in excess of \$100.00. This applies to bid or contingent items and/or negotiated work that may not be covered herein.

1-26. TESTS OF MATERIAL SAMPLES:

All tests of materials shall be made in accordance with the official approved methods as described or designated at a laboratory or testing bureau approved by the City. The cost of testing samples of materials obtained at the job site shall be paid by the Owner or Contractor who shall cooperate and assist in making field tests and in obtaining samples.

1-27. CARE AND PROTECTION OF WORK:

From the commencement of the contract until its completion, the Contractor and Owner shall be solely responsible for the care of the work; and all injury or damage to the same from whatever cause, shall be made good by him at his own expense before the final payment is made. He shall provide suitable means of protection for all materials intended to be used in the work in progress, as well as for complete work.

1-28. DEFECTIVE WORK:

Neither the inspection or supervision of the work, nor the presence or absence of any employee or agent of the City during the execution of any part of the work, shall relieve the Contractor of any of his obligations under the contract or of conforming his work to the lines; grades and elevations which are required; and defective work shall be made good and unsuitable material will be rejected, notwithstanding that such work and material may have been previously overlooked and accepted or estimated for payment. If the work or any part thereof shall be found defective within one year of final acceptance or to have been damaged, at any time before the final acceptance of the whole work, the Contractor shall forthwith make good such defect or injury, in a manner satisfactory to the City, without extra compensation therefore, even though said defect or injury may not have been due to any act, default or neglect on the Contractor's part; provided, however, that should such defective work result from inherent flaws in the materials (if any) furnished by the Owner, the materials to replace same will be furnished by the Owner, and the cost of removing and replacing said defect will be paid for as extra work. All materials shall be carefully examined by the Contractor for defects, just before placing, and any found defective shall be rejected.

1-29. CLAIMS FOR DAMAGE:

A. If the Contractor shall claim compensation for any damage sustained by reason of the acts of the Owner, or any official or agent thereof, he shall, within five (5) days after the sustaining of such damage, make a written statement to the

Owner of the nature of the damage sustained, and shall on or before the fifth day of the month succeeding that in which he shall allege that such damage has been sustained, file with the Engineer an itemized statement of the details and amount of such damage. Unless such statement shall be made as thus required, his claim for compensation shall be forfeited and invalidated, and he shall not be entitled to payment on account of any such damage.

- Whenever it shall appear to the Contractor that due to the urgencies of the work, he is about to incur damage, owing to the neglect or refusal of the Engineer to issue an extra order, or to any other cause whatever, he shall at once notify the Owner in writing of such fact and state the nature of his possible claim, in order that the Engineer may obtain necessary and authentic information to quide consideration and action on such claim; and unless the Contractor shall comply with this requirement, his claim for damage shall be forfeited and invalidated. Such notification shall not take the place of, but shall be in addition to, the written statement hereinbefore required to be submitted within five (5) days after the occurrence of an alleged cause for damage.
- C. In no case shall the City be held liable for claims of damage by or between the Owner, Engineer, and/or Contractor.

1-30. UNAUTHORIZED WORK:

Work done without lines and grades being given, work done beyond the lines and grades shown on the plans or as given, except as herein provided or any extra work done without written authority, will be considered as unauthorized and at the expense of the Contractor and will not be approved by the City or paid for by the Owner. Work so done may be ordered removed and replaced by the City at the Contractor's expense.

1-31. LAWS AND REGULATIONS:

In all operations connected with the work, all ordinances and regulations of incorporated towns within which same is to be done, and all United States, State and County Laws, which shall be or become applicable to, and control or limit in any way the actions of those engaged as principal or agent, must be respected and strictly complied with. The Contractor shall protect and indemnify the Owner and its officers and agents against any claim or liability arising from or based on the violation of any such law, ordinance or regulation, whether by himself or his employees. The Contractor shall pay all taxes required by Federal, State and County laws.

1-32. INSURANCE:

- A. The Contractor shall not commence work under this contract until he has obtained all insurance required under Section 1-33 and such insurance has been approved by the Owner; nor shall the Contractor allow any subcontractor to commence work on his subcontract until all similar insurance required by the subcontractor has been so obtained and approved.
- B. The Contractor shall take out and maintain during the life of this contract adequate Workmen's Compensation Insurance and Employees' Liability Insurance for all his employees employed at the site of the project and, in case any work is sublet, the Contractor shall require the subcontractor similarly to provide Workmen's Compensation Insurance and Employees' Liability Insurance for the latter's employees unless such employees are covered by the protection afforded by the Contractor.

1-33. LIABILITY INSURANCE:

- A. The Contractor shall maintain such insurance as will protect him from claims under Workmen's Compensation Acts and from any other claims for damage for personal injury, including death, and property damage which may arise from operations under this contract, whether such operations be by himself or by any subcontractor or anyone directly or indirectly employed by either of them. Certificates of such insurance shall be filed with the Owner and shall be subject to its approval for adequacy or protection. The certificates shall designate "The Mayor and Common Council of Westminster, its employees and agents" as additional insureds.
- B. Limits of Insurance Coverage shall be in an amount not less than the following:
 - General Liability \$ 2,000,000 Annual Aggregate
 1,000,000 Each Occurrence
 1,000,000 Products & Completed
 Operations
 1,000,000 Personal Injury &
 Advertising
 - Automobile Liability \$ 1,000,000 Combined Single Limit
 - Workers' Compensation -- Statutory
 - **Excess** \$ 1,000,000 Each Occurrence

- C. The contractor shall provide to the City evidence of all insurance required herein.
- D. The special hazard of blasting, when anticipated and called for in the Special Provisions, and/or whenever rock or any other obstruction(s) is (are) encountered in the work which makes blasting necessary or desirable, shall be covered by rider or riders to the Public Liability and Property Damage Insurance policy or policies herein required to be furnished by the Contractor or by separate policies in the minimum amount of \$100,000 Property Damage and \$1,000,000 Bodily Injury.
- E. The Contractor shall also maintain such insurance and/or riders to policies already issued, when required by the Owner to cover any special hazards which may develop in the course of the work with such companies and in such amounts as may be approved by the Owner.

1-34. PERMITS, LICENSES, CHARGES, NOTICES:

The Contractor shall procure and pay for all permits and licenses, pay all royalties, fees and charges and give all notice necessary and incidental to the due and lawful prosecution of the work.

1-35. PATENT RIGHTS:

- A. Whenever any article, materials, appliance, process, composition, means or things called for by these specifications is covered by Letters Patent, the successful bidder must secure, before using or employing such material, appliance, etc., the assent in writing of the Owner or Licensee of such Letters Patent and file the same with the City.
- B. The said assent is to cover not only the use, employment, and incorporation of said article, material, appliance, process, composition, combination, means or thing in the construction and completion of the work, but also the permanent use of said article, material, appliance, etc., thereafter by or in behalf of the City, in the operation and maintenance of the project for the purpose for which it is intended or adapted.
- C. The Contractor shall be responsible for any claims made against the City, its agents and employees for any actual or alleged infringement of patents by the use of any such patented articles, appliances, etc., in the construction and completion of the work and shall save harmless and indemnify the City, its agents and employees from all costs, expenses, and damages, including solicitor's and attorney's fees, which

the City may be obliged to pay by reason of any actual or alleged infringement of patents used in the construction and completion of the work herein specified.

1-36. WATER SUPPLY:

The Contractor shall provide at his own expense such quantities of clean water as may be required for any and all purposes under the contract. He shall take particular care to furnish his employees with pure and wholesome drinking water. All sources of water supply to be used by the Contractor in connection with the work shall be subject to the approval of the City, and shall be indicated to the City by the Contractor five (5) days before beginning work, so that examination of said supplies can be made.

1-37. SANITARY ARRANGEMENTS:

- A. Approved sanitary convenience for the use of laborers and others employed on the work, properly secluded from public observation, shall be constructed and maintained by the Contractor, in such manner and at such points as shall be approved or directed and their use shall be strictly enforced. The collections in the same shall be disinfected and/or removed when and as directed.
- B. The Contractor shall provide and maintain in a neat and sanitary condition such accommodations for the use of his employees as may be necessary to comply with the requirements and regulations of the Department of Health or of other bodies or tribunals having jurisdiction thereof. He shall commit no public nuisance.

1-38. ELECTRIC POWER:

The cost of electric current used for the construction of this contract, including that current furnished for the Contractor's Field Office, Engineer's Field Office, pumping of water and other purposes shall be borne by the Contractor.

1-39. LIGHTS, BARRICADES AND WATCHMEN:

The Contractor shall place sufficient lights on or near the work and keep them burning from twilight to sunrise. He shall erect suitable railings, fences, or other protection about open trenches, and provide all watchmen on the work, by day or night that may be necessary for the public safety. He shall place proper guards and lights for the prevention of accidents during and after delivery of materials and supplies, and shall at all times take all necessary precautions to avoid accidents or injury to persons or property. The Contractor shall upon notice from the Engineer that he has not

satisfactorily complied with the foregoing requirements, immediately take such measures and provide such means and labor to comply therewith as the Engineer or City may direct, but the Contractor shall not be relieved of his obligations under the contract by any such notice or directions given by the Engineer or City, or by his neglect, failure or refusal to give such notice or direction. In case the Contractor shall not comply with any other with respect to guarding his work, or in case of emergency, without notice to the Contractor, if the Owner deems it necessary, the Owner shall provide the required protection and the cost thereof will be deducted from any monies due or to become due the Contractor under the The Contractor shall not be relieved of his contract. obligations under the contract by any such action of the Owner.

1-40. EXPLOSIVES:

- A. The Contractor shall be licensed in accordance with Regulation C., Title Explosives, pursuant to Chapter 919 of the Acts of 1941, State of Maryland, and shall store all explosives and conduct all operations as regards explosives in accordance with the aforementioned regulation.
- B. The Engineer shall be empowered to regulate the character and strength of explosives used. Blasts shall be properly and securely covered.
- C. The Contractor shall be solely responsible for injury to persons or property that may result from his use of explosives, and the exercise of, or failure of exercise control on the part of the Engineer, shall in no way relieve the Contractor's responsibility for injury or damage resulting from their use.
- D. Under no circumstances shall blasting operations be performed without the use of blasting mats and earth cushion. Such provisions are mandatory and are for the purpose of protecting lives and property.
- E. Adequate advance warning of blasting operations shall be given by the Contractor.

1-41. INJURY TO PROPERTY:

In case any direct or indirect damage is done to public or private property by or because of the work, or in consequence of any act or omission on the part of the Contractor, his employees or agents, the Contractor shall, at his own expense, restore such property to a condition similar or equal to that existing before such damage was done, by repairing, rebuilding, or otherwise shall make good such

damage in a satisfactory manner; and in case of failure on the part of the Contractor to promptly so restore such property, or make good such damage, the Owner shall, upon forty-eight (48) hours written notice, proceed to repair, rebuild or otherwise restore such property as may be necessary and the cost thereof will be deducted from any monies due or to become due the Contractor under the contract; or the Owner shall deduct from any monies due the Contractor a sum sufficient in the judgment of the Owner to reimburse the owners of the property so damaged.

1-42. INDEMNIFICATION OF CITY:

The Contractor shall indemnify and save harmless the City, its employees and agents from all suits, actions and damages or costs, of every name and description, to which the City, its employees and agents may be subjected or by reason of injury to persons or property as a result of the work, whether caused by negligence or carelessness on the part of the Contractor, his servants or agents or to other cause; and so much of the monies due or to become due the Contractor under the contract as shall be considered necessary by the City shall be retained until such suits or claims for damages shall have been settled or otherwise disposed of, and satisfactory evidence to that effect furnished to the City.

1-43. CONTRACT TIME FOR COMPLETION:

The Contractor shall schedule his work in such a manner so as to perform the work under this contract within the number of calendar days stated in the Proposal.

1-44. EXTENSION OF TIME:

- A. If the Contractor is delayed or obstructed in the prosecution of the work by any neglect, delay or default attributable to the Owner, or by any damage that may happen to the work by fire, unavoidable accident or any unusual action of the elements, he shall be entitled to such an extension of time for the completion of the work as the Engineer shall certify to the Owner be just and reasonable; provided however, that the Contractor shall make a claim in writing for such extension of time within ten (10) days after the date the alleged cause for such extension of time occurred.
- B. A reasonable and proper extension of time for the completion of the work may also be allowed by the Owner on account of extra work that may be ordered in accordance with the terms of the contract.
- C. If the satisfactory execution and completion of the contract shall require work or material in greater amounts or quantities than those set forth in the contract, then the

contract time shall be increased in the same proportion as the additional work bears to the original work contracted for.

1-45. NORMAL WORK WEEK AND HOLIDAYS:

- A. The City observes the following holidays; New Year's Day, Washington's Birthday, Martin Luther King Day, Good Friday, Memorial Day, Independence Day, Labor Day, Thanksgiving Day and the Friday following Thanksgiving and Christmas Day.
- B. The normal work week shall be five (5) days and the Contractor will not be permitted to work on the above mentioned holidays or on Saturdays or Sundays unless otherwise authorized by the City in writing.
- C. The normal number of working hours per day will be limited to a maximum of eight (8), unless otherwise authorized by the City.
- D. In case of an emergency, which may require that work be done on Saturdays, Sundays, holidays or longer than eight (8) hours per day, the Contractor shall request permission of the City to do so. If in the opinion of the City, the emergency is bona fide, it will grant permission to the Contractor to work such hours as may be necessary. Also, if in the opinion of the City, a bona fide emergency exists, it may direct the Contractor to work such hours as may be necessary whether the Contractor requests permission to do so or not. All costs related to overtime wages for inspectors shall be borne by the Contractor provided such overtime is for the convenience of the Contractor.
- E. In the event working times exceed those times specified above, for reasons stated above or at the Contractor's request; and the services of inspection personnel are deemed necessary, as determined by the City; the Contractor shall bear the costs for overtime inspection. Such costs shall be deducted from monies due the Contractor from time to time.

1-46. RESPONSIBILITY OF THE CONTRACTOR:

- A. It is the responsibility of the Contractor to construct the work under this contract so that it will be complete and finished in every detail. If mention has been omitted in the contract documents of any items of work or materials which are necessary for the completion of, or proper functioning of, the construction, it shall be included without extra payment.
- B. If damage is done to any existing work or work placed under this contract, such as cutting masonry, concrete work, paving, damage to existing utilities, etc., such damage must

be repaired and made good without extra payment to the full satisfaction and approval of the City and any agencies having jurisdiction whose work has been affected.

1-47. SHOP DRAWINGS:

- A. The Contractor shall submit for the approval of the City, five (5) prints of certified working drawings for all fabricated or manufactured articles to be used in the work. No items requiring submission of detail drawings shall be manufactured prior to final approval of the drawings.
- B. Two (2) prints of each drawing submitted will be returned approved if found correct, or else showing the changes required. Five (5) copies shall be re-submitted after corrections have been made until final approval is given by the City.
- C. The approval of the drawings shall not relieve the Contractor from his responsibility to furnish all materials and perform all work as required by the contract documents. The City will not be responsible for errors or omissions on drawings furnished by the Contractor, even though drawings furnished containing such errors or omissions are inadvertently approved.

1-48. PAYMENT FOR MATERIAL NOT INCLUDED IN THE WORK:

Payment for equipment and materials stored on the site of the work and not actually incorporated in the work will be made on the basis of amounts of paid bills submitted to the Engineers along with the monthly estimate as described under "Current Estimates".

1-49. USE OF A PORTION OF THE WORK:

- A. Whenever in the opinion of the City any portion of the work is completed or is in acceptable condition for use, it may be used for its intended purpose as may be directed; and such use shall not be held to be in any way an acceptance of that portion of the work used or as a waiver of any of the provisions of these contract documents.
- B. Necessary repairs or renewals made in any section of the work under instructions from the City due to defective materials or work, natural causes, or ordinary wear and tear, or otherwise, pending final completion and acceptance of the entire work, shall be performed at the expense of the Contractor.

1-50. LIENS:

Neither the final payment nor any part of the retained percentage shall become due until the Contractor shall deliver to the Owner and City a complete release of all liens arising out of this contract, or receipts in full in lieu thereof and, in either case, an affidavit that so far as he has knowledge or information, the releases and receipts include all the labor and material for which a lien could be filed, but the Contractor may if any subcontractor refuses to furnish a release or receipt in full, furnish a bond satisfactory to the Owner and City, to indemnify them against any lien. If any lien remains unsatisfied after all payments are made, the Contractor shall refund to the Owner all monies that the latter may be compelled to pay in discharging such a lien, including all costs and reasonable attorney's fee.

1-51. SUBLETTING OR ASSIGNMENT OF CONTRACT:

- A. The Contractor shall keep the work under his own control, and shall not assign, by power of attorney or otherwise, nor sublet the work, or any part thereof, without the written consent of the City. He shall submit, in writing, the name of each subcontractor as he intends employing, the portion of the work which he is to do or the material which he is to furnish, his place of business, and such other information as the City requires in order to know whether said subcontractor is reputable, reliable, and able to properly perform the work he proposes to do.
- B. The Contractor shall not, either legally or equitably, assign any of the monies payable under the contract, or his claim thereto, except by consent of the Owner.
- C. Written consent by the Owner or City to sublet or assign any portion of the contract shall not be construed to relieve the Contractor or surety of any responsibility for the fulfillment of the contract.

1-52. PROSECUTION OF WORK:

- A. The Contractor shall begin work promptly on or before notice to proceed on the contract and shall diligently prosecute the same so that it shall be fully completed within the number of working days and the completion date named. Unless work under the contract is started within ten (10) days after the notice to proceed on the contract, the contract shall be void if the Owner notifies the Contractor to that effect.
- B. If at any time, progress in keeping with the intent of the contract shall not have been made, the Contractor shall increase the force and supply additional equipment as may be necessary to complete the work at the time and in the manner specified in the contract. Should the prosecution of the work

be suspended by the Contractor, with the consent of the Engineer, the Contractor shall notify the Engineer in writing at least forty-eight (48) hours before resuming operations.

C. Notification must be given to the City forty-eight (48) hours in advance of any beginning or cessation of work.

1-53. CHARACTER OF WORKMEN AND EQUIPMENT:

- A. The Contractor shall employ only competent, skillful people to do or supervise the work, and whenever the City shall, in writing, notify the Contractor that any person employed on the work is, in its opinion, incompetent, disobedient, unfaithful, disorderly, discourteous, or otherwise unsatisfactory, such person shall be removed and shall not again be employed on the work.
- B. The character, condition, adaptability and quantity of equipment used by the Contractor shall be such as will be necessary for the proper execution of the work within the specified working time. Power shovels, power cranes, compressors, tampers, power rollers, pavement breaking, material handling and all other equipment used shall be maintained in good condition and shall be subject to approval of the City prior to and during its use in connection with the work to be performed under the contract.

1-54. STRIKES:

The Contractor shall adjust all strikes, or other labor troubles, and no allowance will be made for such delays in the time limit herein named.

1-55. ABANDONMENT OR DELAY OF WORK:

If the work under the contract shall be abandoned by the contractor, or if at any time the Engineer shall be of the opinion, and shall so certify in writing to the Owner that the performance of the contract is unnecessarily or unreasonably delayed, or that the Contractor is violating any of the provisions of the contract or is executing the same in bad faith, or if the work is not fully completed within the time named for its completion, together with such extension of time as may have been granted, the Owner by written notice, shall order the Contractor to discontinue all work thereunder, or any part thereof; and thereupon, the Contractor shall discontinue the work, or such part thereof; and the Owner shall have the power, by contract, or otherwise, to complete said work and deduct the entire cost thereof from any monies due or to become due the Contractor under the contract. For such completion of the work, the Owner may for itself or its contractors, take possession of and use or cause to be used any or all materials, tools, machinery and appliances found on the line of said work. When any part of the contract is being carried on by the Owner, as herein provided, the Contractor shall continue the remainder of the work in conformity with the terms of the contract, and in such manner as not to interfere with the workmen employed by the Owner.

1-56. SCOPE OF PAYMENT:

The payment of any current, semi-final, or final estimate or the acceptance of any part of the work as provided in the specifications shall in no way or in no degree affect the obligation of the Contractor to repair, correct, renew, or replace, at his own cost and expense, defects or imperfections in the construction of the work under the contract, and this payment shall in no way affect this responsibility for all damages due or attributable to such defects or imperfections which may be discovered before the final acceptance of the whole work, the City to be the judge of such defects or imperfections.

1-57. EXTRA WORK:

- A. The Contractor shall perform extra work for which there is no provision included in the contract, whenever, to complete fully the work as contemplated, it is deemed necessary or desirable, by written authority of the Engineer, and such extra work shall be done in accordance with the specifications therefore, or in the best workmanlike manner as directed. This extra work will be paid for at a unit price or lump sum to be agreed upon previously in writing by the Contractor and the Owner, or where such a price or sum cannot be agreed upon by both parties, or where this method of payment is impracticable, the Owner shall order the Contractor to do such work on a "Force Account" basis, as hereinafter specified.
- B. The Owner/Engineer, before ordering any extra work done, from time to time shall determine (1) what extra time, if any, will be allowed for said extra work; or (2) that the extra work is to be done concurrently with the work under the contract and without allowance of any additional time.
- C. Scope of extra work shall be subject to City's approval, and it shall be considered complete only upon City's acceptance.

1-58. EXTRA WORK AS PART OF CONTRACT:

No order for extra work, nor the doing of any extra work at any time or place shall in any manner relieve the Contractor or the Surety of his bond from any of their obligations under the contract documents; all extra work orders being given and all extra work being done, under and in accordance with the contract and to be considered a part of the same and subject to each and every one of the terms and requirements of the contract documents, and fully covered by the bond furnished by the Contractor.

1-59. FORCE ACCOUNT WORK:

- A. All work done on a "Force Account" basis will be paid for in the following manner:
 - 1. For all labor and foremen in direct charge of the specific operation, the Contractor shall receive the rates of wage applicable to this contract, to be agreed upon in writing before starting such work, for each and every hour that said laborers and foremen are actually engaged in such work, to which shall be added an amount equal to fifteen percent (15%) of the sum.
 - 2. For all materials used, the Contractor shall receive the actual cost of such materials, including freight charges, as shown by original receipted bills, to which sum shall be added an amount equal to ten percent (10%) of the sum thereof.
 - 3. For any machine-power tools or equipment, and for any hauling equipment, including fuel and lubricants, which it may be deemed necessary or desirable to use, the Engineer shall allow Contractor a reasonable rental price, to be agreed upon in writing before such work is begun, for each and every hour that said tools or equipment are in use on such work, and to which sum no percentage shall be added.
- The compensation as herein provided shall be received by the Contractor as payment in full for work done on a "Force Account" basis, and shall include superintendence, use of tools and equipment for which no rental is allowed, and The Contractor's representatives and the Engineer profit. shall compare records of work done on a "Force Account" basis at the end of each day. Copies of these records shall be made in duplicate, upon the Engineer's "Force Account" forms provided for this purpose, by the Engineer and signed by both the Engineer and the Contractor's representatives, one copy being forwarded respectively to the Engineer and the Contractor. All claims for work done on a "Force Account" basis shall be submitted to the Engineer by the Contractor upon certified triplicate statements, which shall also include the value of all material used in such work; and said statements shall be filed not later than the fifteenth (15th)

day of the month following that in which the work was performed and shall include all labor charges, etc., and material charges insofar as they can be verified.

- C. Should the contractor refuse or fail to prosecute the work as directed or to submit his claim as required, then the Owner may withhold payment of all current estimates until the Contractor's refusal or failure is eliminated, or after giving the Contractor due notice, the Owner may make payment for said work on the basis of a reasonable estimate of the value of the work performed.
- D. On work as defined in this paragraph, the contractor will be reimbursed for his expenditures for Workmen's Compensation Insurance, Public Liability Insurance, Social Security Taxes and Unemployment Compensation, covering the men actually engaged upon such work. No percentage will be added to such payments, but the Contractor shall be entitled to receive only the actual amount of money expended for such Workmen's Compensation Insurance, Public Liability Insurance, Social Security Taxes and Unemployment Compensation. Such payments shall be based upon the prevailing standard insurance rates supported by receipted vouchers from the insurance vendors and upon the actual amount of taxes paid for Social Security and Unemployment Compensation as evidenced by proper documents furnished by the Contractor.

1-60. CURRENT ESTIMATES:

- A. The Engineer will, except in the month following that during which the work under the contract is completed, as soon as possible after the 1st day of the month, make in writing an estimate such as he shall believe to be just and fair, of the amount of work done under the contract during the preceding calendar month. Such estimate shall not be required to be made by strict measurement, but may be approximate only and shall be subject to correction in later estimates. Current estimates shall not contain any allowance for materials delivered upon the site of the work, but not incorporated herein, and the Contractor shall not be entitled to receive any payment therefore.
- B. Upon the City's approval of each current estimate, the Owner may pay to the Contractor ninety percent (90%) of the total amount of the estimate; provided, however, that the Owner may retain out of any such payment any or all sums which by the terms of the contract, or of any law of the State of Maryland in force at the date of signing of the contract, it is authorized to retain. Payments on current estimates may be at any time withheld if, in the judgment of the City, the Contractor is not complying with the terms of the contract.

C. The City may release from Owner's surety an amount commensurate with the approved payment to the Contractor, subject to retainage as determined by City.

1-61. CONDITIONAL ACCEPTANCE AND SEMI-FINAL ESTIMATE:

- A. When the Engineer shall deem that the Contractor shall have fully completed the work under the contract, he shall make a written semi-final estimate of the whole amount of authorized work done by the contractor and of the value thereof under the terms of the contract, and shall certify to the Owner the completion of the work and the amount of the semi-final estimate. All current estimates are subject to correction in the semi-final estimate. The Engineer's measurements upon which the semi-final estimate is based, shall be deemed to be and shall be final and conclusive.
- Upon approval of the semi-final estimate, the Owner will notify the Contractor, in writing, of the conditional acceptance of the work, and transmit to him a copy of the Out of the amount representing the total of the semi-final estimate, the Owner shall deduct five percent (5%) which shall be in addition to any and all other amounts which under the contract it is entitled or required to retain, and shall hold said sum for a period of three (3) months from and after the date of payment of the semi-final estimate, as hereinbelow stipulated. Such part as may be necessary, or all of said retained sum shall be applied to any expense to which the Owner may be subjected, during said period of three (3) months, in repairing any defects found in the work under the contract which may be deemed to have been caused by failure of the Contractor to comply with the terms of the contract, or to any breach of the contract whatsoever on the part of the Contractor. The Owner shall be empowered to make any required repairs or renewals during said period, without notice to the Contractor if it shall judge such action to be necessary, or if, after notice to the Contractor if it shall judge such action to be necessary, or if, after notice, the Contractor shall refuse or neglect to do said required work or make satisfactory progress thereon within such period as the Engineer shall consider necessary or reasonable.
- C. Within fifteen (15) days after the approval of the semi-final estimate, the Owner will pay to the Contractor the amount remaining after deducting from the total amount of the semi-final estimate all such sums as have therefore been paid to the Contractor under the provisions of the contract and also such amounts as the Owner is authorized under the contract to reserve or retain.

1-62. FINAL INSPECTION, FINAL ESTIMATE AND FINAL PAYMENT:

Upon the expiration of the aforesaid period of three (3) months succeeding the payment of the semi-final estimate, paid as above stipulated, the Owner will make a final inspection of the work under the contract. After the Owner is satisfied that all requirements of the contract have been met, after all repairs have been made to any defective work which may have become evident during the above mentioned three (3) month period, and after the Guarantee or Maintenance Bond, has been furnished, the Owner will pay (as the final payment) to the Contractor all sums reserved or retained, less such amounts as it is empowered under the provisions of the contract permanently to retain.

1-63. EVIDENCE OF PAYMENT:

The Contractor shall furnish the Owner with satisfactory evidence, before or within ten (10) days after the final completion and acceptance of the whole work under the contract, and the final payment has been made, that all persons, partnerships and corporations who have done work or furnished materials under the contract, or in or about the work contracted for, and who have given written notice to the Owner of claims against the Contractor on account thereof, have been fully paid or secured. In the event such evidence is not furnished by the Contractor, such amount deemed necessary by the Owner to pay such claims shall be retained by the Owner out of any money due the Contractor under the contract until such claims shall have been fully discharged or such notice withdrawn. The Owner may also, with the written consent of the Contractor, use any money retained, due or to become due under the contract, for the purpose of paying for both labor and material for the work, for which claims have not been filed with the Owner.

1-64. TERMINATION OF OWNER'S LIABILITY:

The acceptance by the Contractor of the final payment made as aforesaid, shall operate as and be a release to the Owner and every officer and agent thereof, from all claims by the liabilities to the Contractor for anything done or furnished for or relating to or affecting the work under the contract.

1-65. PRE-BID CONFERENCE:

May be required at City's discretion.

1-66. TELEPHONE NUMBERS:

The Contractor shall furnish the Owner and City the names, addresses and telephone numbers of the responsible personnel who may be contacted at all times in the event the Contractor's services may be required for any eventuality or conditions affecting this work.

1-67. EXISTING UTILITIES AND SERVICES:

- A. There are shown on the plans the approximate location of existing underground services and utilities. These have been placed on the plans from the best available information that could be obtained. However, no guarantee is given to the accuracy or completeness of the extent and location of these services and utilities. The Contractor shall exercise all possible caution in maintaining such services and utilities in a continuous operating condition.
- B. If it becomes necessary to interrupt these services and/or utilities, the Contractor shall provide written notice to the individual properties and to the City at least forty-eight (48) hours in advance of actual interruption. In no case shall an individual service be interrupted for a period exceeding four (4) hours.
- C. All costs related to repair or replacement of services and/or utilities shall be included in the respective unit prices bid for installation of services.

1-68. STANDARD SPECIFICATIONS:

Whenever standard specifications are referred to, they shall be the latest edition of that specification, and they shall be considered to be a part of these specifications insofar as they apply. Standard specifications referred to herein and the abbreviations by which they are referred to are as follows:

AASHO - American Association of State Highway Officials

ASTM - American Society for Testing and Materials

AWWA - American Water Works Association

MSHA - Maryland State Highway Administration

ACI - American Concrete Institute

AWA - American Welding Society

SSPC - Steel Structures Painting Council

ANSI - American National Standards Institute
ASME - American Society of Mechanical Engineers

FS - Federal Standard Stock Catalog

CS - Commercial Standards, U. S. Department of Commerce, National Bureau of Standards MUTCD - Manual on Uniform Traffic Control Devices

1-69. SAFETY:

In order to protect the lives and health of his employees under the contract, the Contractor shall comply with all occupational safety laws adopted by the State and local government and shall maintain an accurate record of all cases of death, occupational disease, and injury requiring medical attention or causing loss of time from work, arising out of, and in the course of, employment on work under the contract. He will erect and maintain, as required by the conditions and progress of the work, all necessary safeguards, including the posting of danger signs and other warnings against hazards. All damage, injury or loss referred to in the proceeding paragraphs caused directly or indirectly, in whole or in part, by the Contractor, or any subcontractor or anyone employed by them will be remedied by the Contractor. The contractor alone shall be responsible for the safety, efficiency, and adequacy of his plant, appliances, and methods, and for any damage which may result from their failure or their improper construction, maintenance or operation.

1-70. BID PROPOSAL - QUANTITIES, ETC.:

In the event of over/under run in quantities and/or conditions, the Contractor shall be paid/reimbursed in accordance with unit prices in Bid Proposal. Quantities and amounts are as accurate as can be determined from available data and information. Contractor shall expect reasonable deviations from proposed quantities, which may be more or less, and total cost of contract shall be so determined.

1-71. MAINTENANCE OF TRAFFIC:

Traffic must be maintained on all streets during the construction period. The Contractor shall schedule his construction operations in such a manner as will cause the least inconvenience to the public. Costs incurred shall be at the Contractor's expense. Methods of traffic control used shall be in strict accord with the Traffic Control Plan and the MUTCD.

1-72. CONSTRUCTION SEQUENCE:

The Contractor's attention is directed to the fact that essential services and vehicular access must be maintained in the zone of construction. The sequence of construction shall be established prior to start of construction and presented by the Contractor in a proposed schedule. The schedule will be

submitted to the Engineer and City for approval. Once the Contractor's proposed construction sequence has been approved, no deviation from that sequence without the advance approval of the City will be permitted except in emergencies. construction of main line sewers shall commence at the lowest point and proceed up slope to the highest point. Installation of manholes, manhole frames and covers, and laterals shall concurrently with main line installations. Installation of laterals between any two (2) adjacent manholes shall commence within fifteen (15) calendar days following the installation of the main line sewer connecting those two (2) manholes and shall be completed as soon as practicable For the purposes of this paragraph the term thereafter. "lowest point" is defined as the point of connection to an existing sewer line or structure.

1-73. EROSION AND SEDIMENT CONTROL:

- A. The Contractor's attention is directed to the provisions and requirements in Chapter 245 of the Acts of 1970 of the State of Maryland. Under this Act it is necessary for the Contractor to obtain permits and/or approvals from the appropriate County agency for any off-site work which includes off-site borrow pits, waste areas and the treatment of these during and after the completion of the grading. The County agency will refer the plan for such areas to the Soil Conservation District for review and approval of the erosion and sediment control provisions. A copy of the permits or approvals must be furnished to the Engineer prior to starting any work covering the said permits or approvals. In the event of conflict between these Federal, State or Local agencies, the more restrictive laws, rules or regulations will apply.
- B. The erosion control features installed by the Contractor shall be acceptably maintained by the Contractor for the duration of the Contract. The Engineer reserves the right to inspect erosion control measures in off-site borrow pits and waste areas and to report violations of permit requirements to the County agencies.
- C. Any required erosion controls for the pipe work shall be complied with by the Contractor as shown on the drawings or on permits issued.

- SECTION 2 -

TRENCH EXCAVATION, BACKFILL AND PROTECTION

2-01. GENERAL:

- A. The Contractor shall excavate, protect, and refill all trenches and other excavations that may be necessary for constructing the work under this contract, as indicated on the drawings and specified herein. Trench excavations shall, in general, be excavated and backfilled by hand and machinery, as the Contractor may elect; provided however, that the Owner or the City shall be empowered when it deems necessary to direct that hand excavation shall be employed; and provided further that backfilling by hand shall be done to the extent hereinafter specified. The Contractor shall have no claim for extra compensation due to the fact that hand, instead of machine excavation, may be required at any location where necessary from any cause whatsoever.
- B. All excavation under this contract will be unclassified. The Contractor shall perform all excavations regardless of the character of the materials to be excavated or condition of the site.
- C. The Contractor shall keep all excavations free from water or other liquids during progress of the work. He shall provide and keep in operation such pumps, drains, ditching, etc., as may be necessary to keep excavations dry and free from water or other liquids.
- D. No measurement will be made of the work described under this Section. Its cost shall be included in the lump sum bid prices for the pipelines under this Contract.

2-02. REMOVAL AND STORAGE OF SURFACE MATERIALS:

A. The Contractor shall remove all surface materials, regardless of the nature, over the line of the trench and the site of the other structures; and he shall properly store, guard and preserve as much of the said material as may be required for use in backfilling, resurfacing, repaving, or for other purposes. All the curb, gutter and flagstones and all paving material which may be removed, together with all materials taken from the trenches, shall be stored in such parts of the roadway or such other suitable place, and in such manner as shall be approved and directed. The Contractor shall be responsible for any loss of or damage to curb, gutter and flagstones and to paving materials through their careless removal or neglectful or wasteful storage, disposal or use.